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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/508,710 07/10/00 COLE

D 33083-PCTUS

021003  
BAKER & BOTTS  
30 ROCKEFELLER PLAZA  
NEW YORK NY 10112

HM22/0522

EXAMINER

KRUSE, D

ART UNIT

PAPER NUMBER

1638

*10*

DATE MAILED:

05/22/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Offic Action Summary</b>	Application No.	Applicant(s)
	09/508,710	COLE ET AL.
Examiner	Art Unit	
David H Kruse	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 7/10/00.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5,7-23,25-27,29-32,34-44,64 & 65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claims 1-5,7-23,25-27,29-32,34-44,64 & 65 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

- 15) Notice of References Cited (PTO-892)      18) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .
- 16) Notice of Draftsperson's Patent Drawing Review (PTO-948)      19) Notice of Informal Patent Application (PTO-152)
- 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ .      20) Other: \_\_\_\_\_ .

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. §§ 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR § 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-4,8-15,20-23,25-27,29-32 and 43, drawn to a polynucleotide encoding a glutathione transferase subunit, chimeric gene comprising said polynucleotide, vector comprising said polynucleotide, a transformed cell comprising said vector, a method of obtaining a transgenic plant comprising said vector and a method of controlling the growth of weeds at a locus comprising said transgenic plant.

Group II, claim(s) 5 and 7, drawn to a GST subunit polypeptide and a chimeric polypeptide of GST subunits.

Group III, claim(s) 16, drawn to a transformed cell comprising multiple polynucleotide sequences coding for a GST subunit.

Group IV, claim(s) 17, 18 and 19, drawn to a method for the production of a polypeptide.

Group V, claim(s) 34-36 and 44, drawn to a method of identifying compounds capable of being metabolized by a GST and the identified compound.

Group VI, claim(s) 37, drawn to an antibody that specifically recognizes a GST polypeptide.

Group VII, claim(s) 38, drawn to a nucleic acid probe which selectively hybridizes to the sequences of SEQ ID NO. 1, 3,5,7, 9, 11, 13, 15 or 17.

Group VIII, claim(s) 39-41 and 65, drawn to a method of identifying compounds that induce GST expression in graminaceous plants.

GROUPS IX, claim(s) 42, drawn to a method of determining the GST level in a sample of seed or flour using an antibody.

Group X, claim(s) 64, drawn to a method of determining the GST level in a sample of seed or flour using a nucleic acid probe.

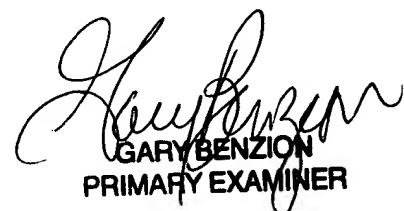
2. The inventions listed as Groups I-X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Polynucleotides encoding a glutathione transferase subunit capable of hybridizing selectively to the coding sequence of SEQ ID NO: 1,3,5,7,9,11,13,15 or 17 were known in the art prior to Applicant's invention. Hence, there is no special technical feature that links the inventions listed as Groups I-X as required under PCT Rule 13.2, nor is there a single general inventive concept as required under PCT Rule 13.1.

3. In addition, Applicant is required to elect one nucleic acid sequence and one encoded amino acid sequence (e.g. SEQ ID Nos. 1 and 2) to be examined in conjunction with the elected group of claims. The Patent and Trademark Office recently published its policy for the examination of patent applications that claim large numbers of nucleotide sequences in the Official Gazette, 1192 O.G. 68 (November 19, 1996). Nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. § 121. Absent evidence to the contrary, each such nucleotide is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. § 121 and 37 CFR § 1.141. In establishing the new policy, the Commissioner has partially waived the requirements of 37 CFR § 1.141et seq. and permits a reasonable number of such nucleotide sequences to be claimed in a single application. It has been determined that normally ten sequences constitute a reasonable number for examination purposes. The Official Gazette Notice of November 19, 1996 is one that permits the examiner to waive restriction to no more than one invention. Since 1996,

databases and resource allocations at the PTO have changed and the examination of 10 sequences on the merits in the instant application would present a burden on PTO resources. Additionally, it is noted that one nucleotide and one amino acid sequence is within the O.G. notice range of "up to ten" sequences. This election is not to be construed as an election of species.

Applicant is advised that the reply to this requirement to be complete within one month (not less than 30 days) must include an election of the invention to be examined even though the requirement be traversed (37 CFR § 1.143).

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR § 1.48(b) and by the fee required under 37 CFR § 1.17(i).



GARY BENZION  
PRIMARY EXAMINER

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (703) 306-4539. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Paula Hutzell can be reached at (703) 308-4310. The fax telephone number for this Group is (703) 308-4242 or (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Yolanda Vines whose telephone number is (703) 305-2365.

David H. Kruse, Ph.D.  
21 May 2001